

FIGURE 1

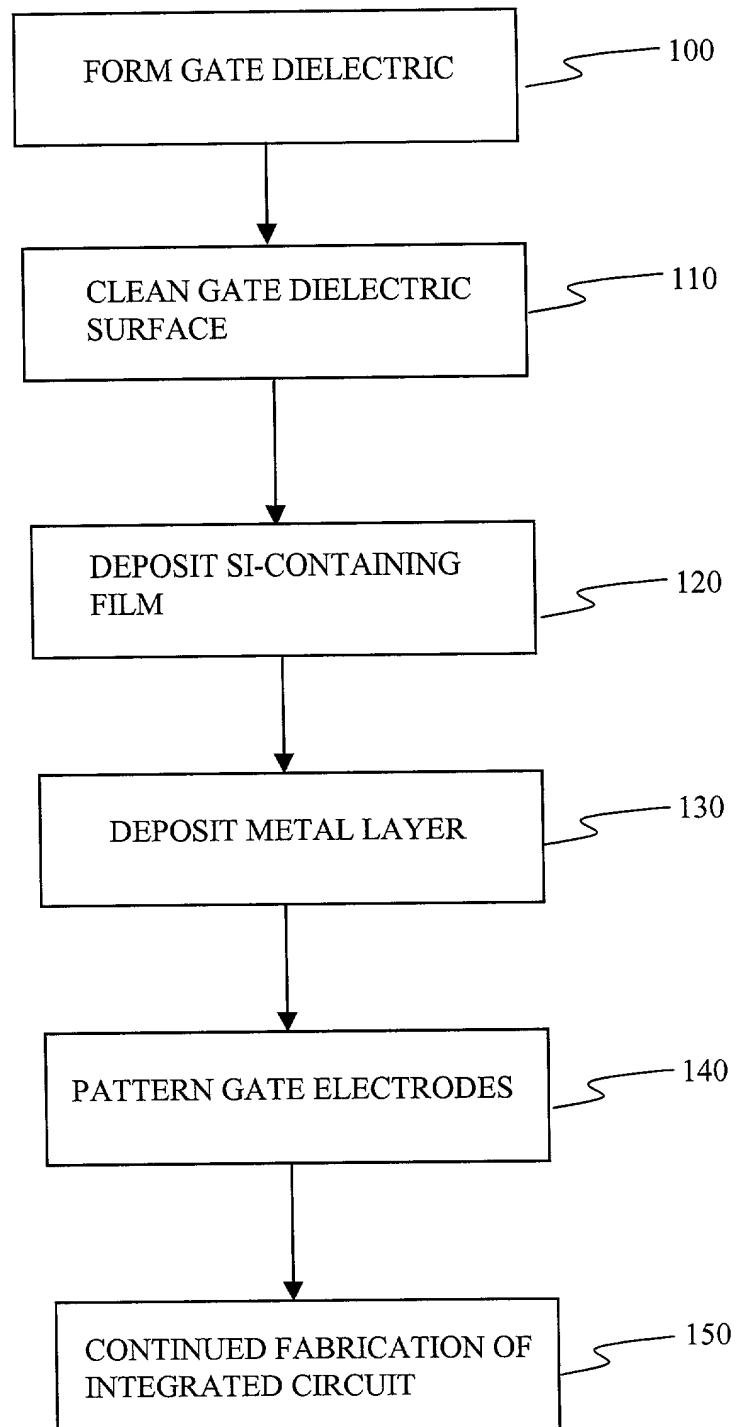


FIGURE 2

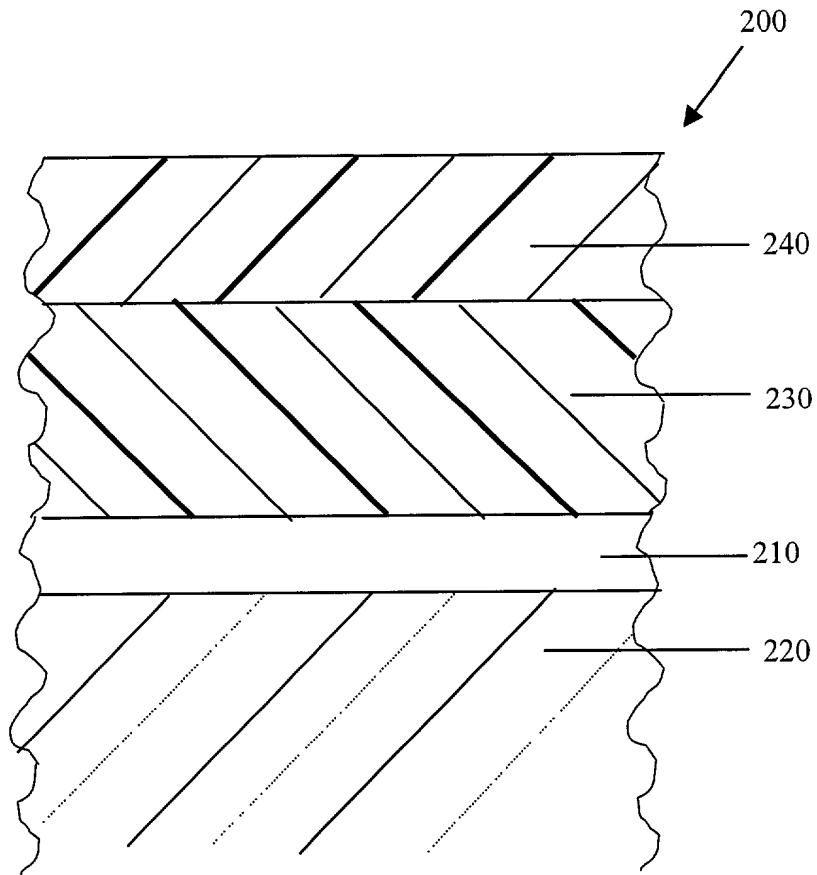


FIGURE 3

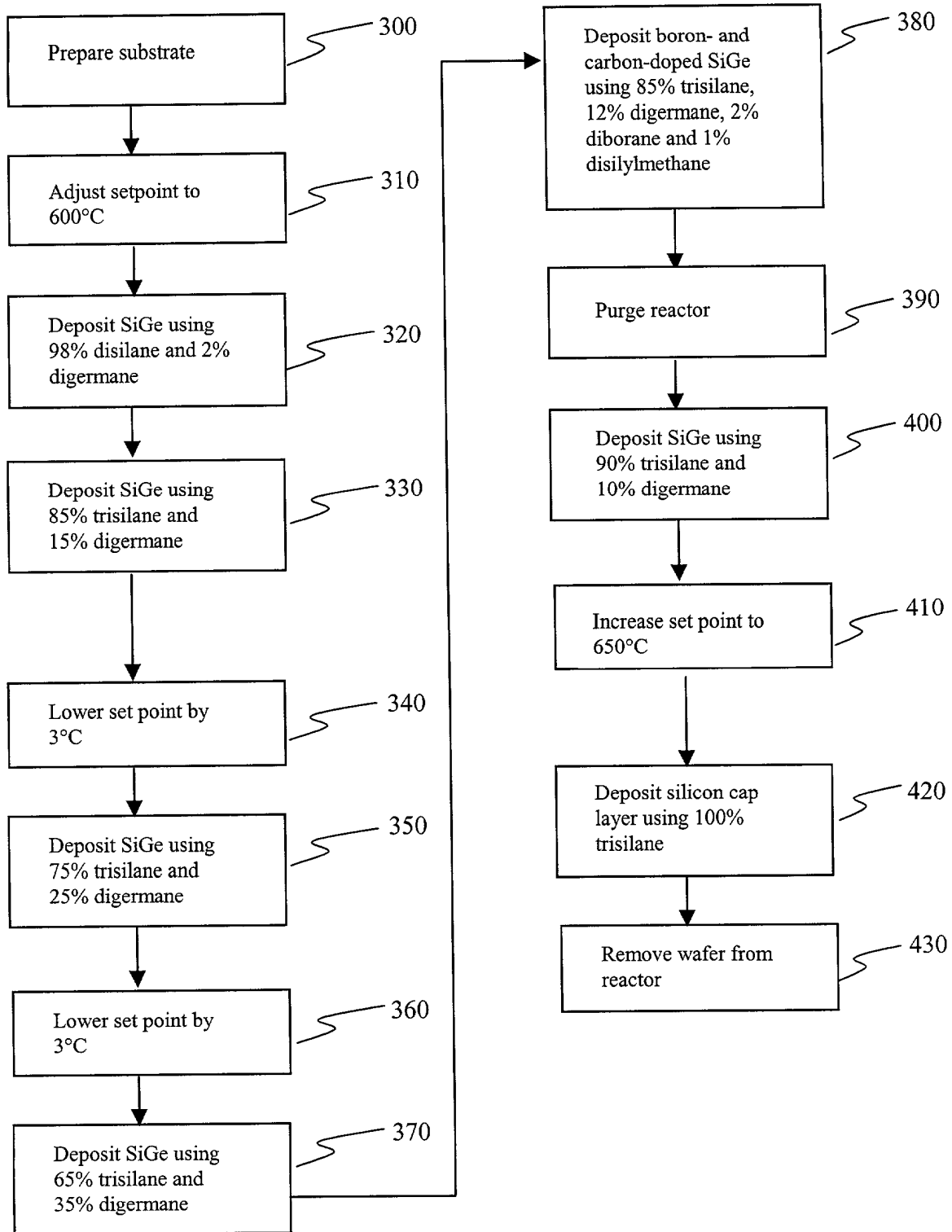


Figure 4: Preferred Ge concentration profile for epitaxial Si-Ge layer in base layer of a heterojunction bipolar transistor

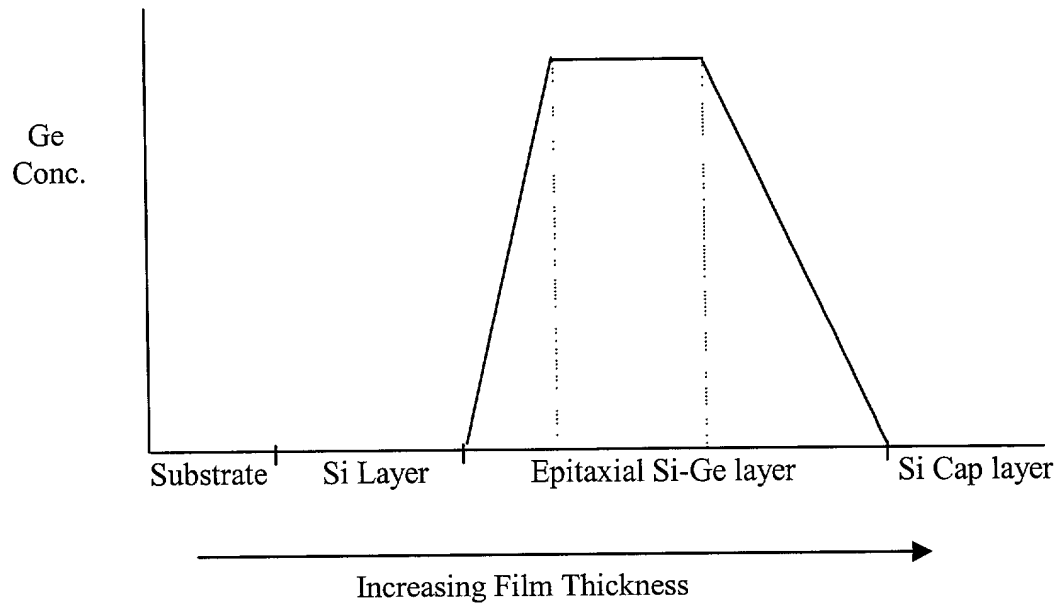


Figure 5: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 600°C

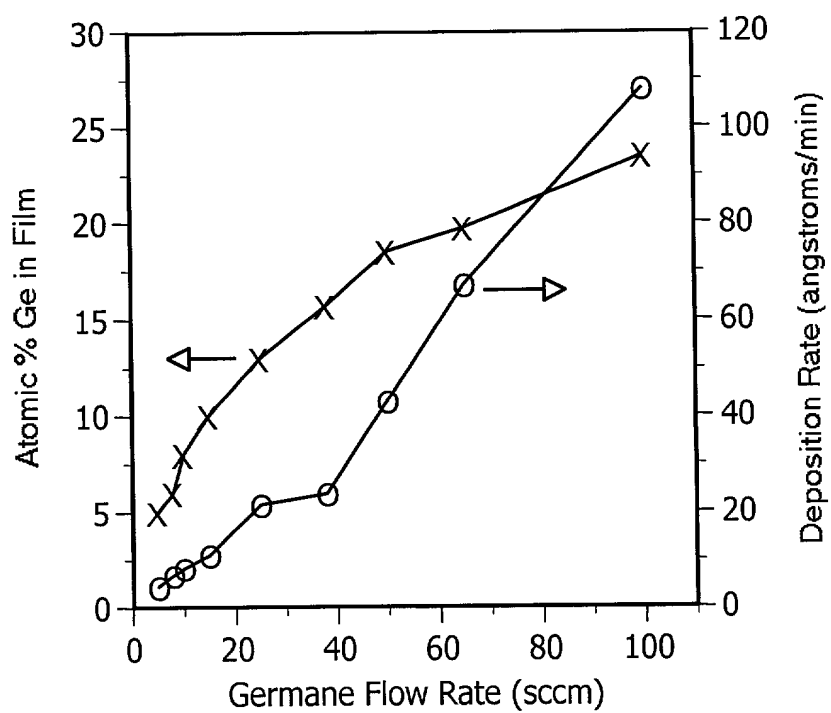


Figure 6: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 625°C

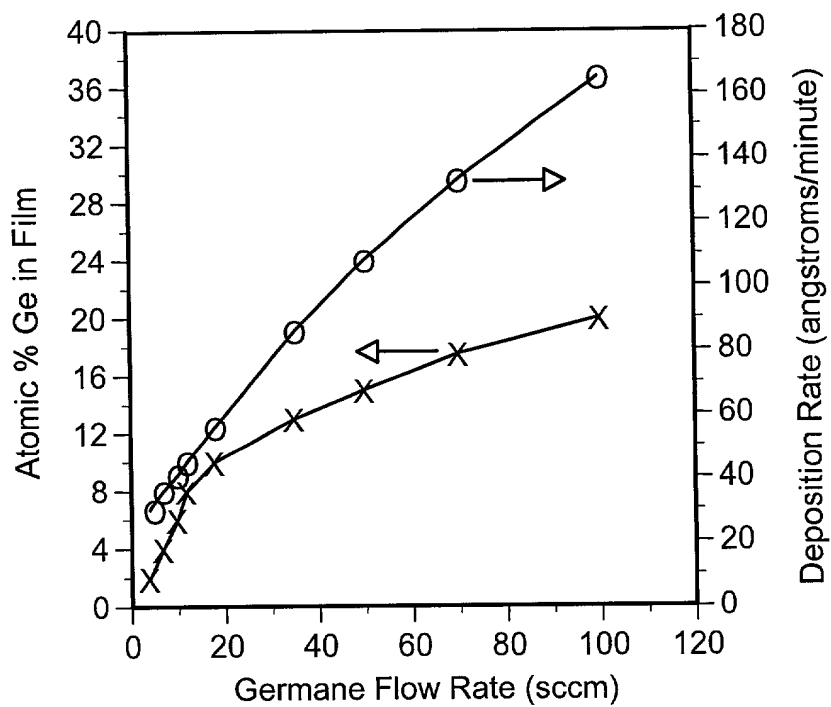


Figure 7: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 650°C

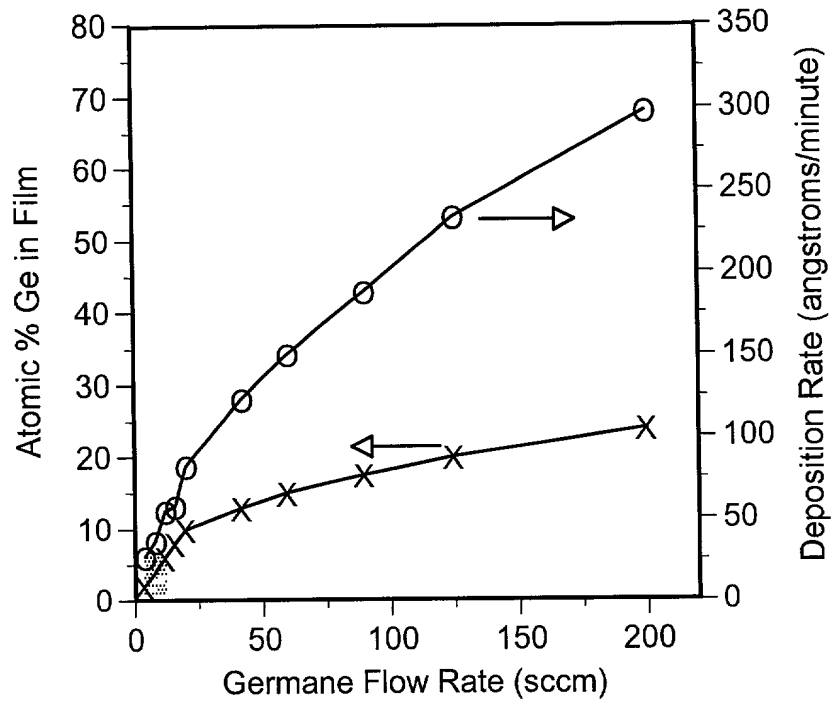


Figure 8: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Silane at 700°C

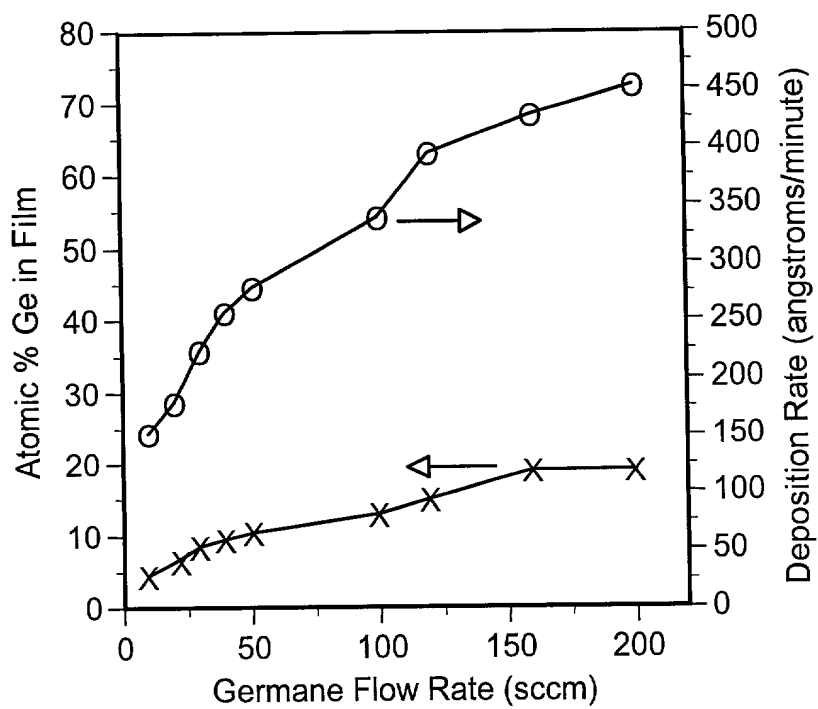




Figure 9: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Trisilane at 600°C (H<sub>2</sub> Flow Rate = 20 slm)

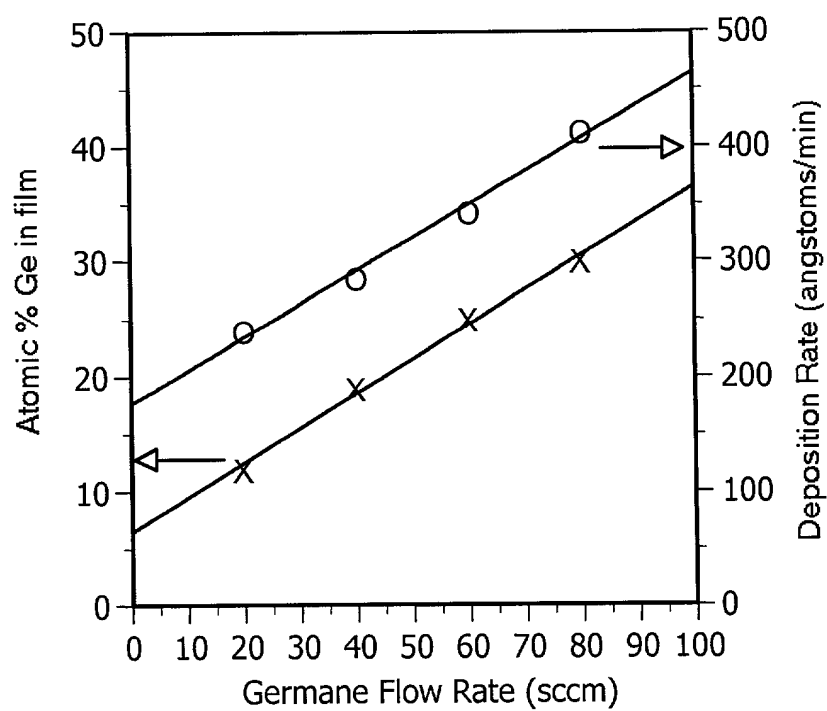


Figure 10: Film Composition and Deposition Rate as a Function of Germane Flow Rate Using Trisilane at 600°C (H<sub>2</sub> Flow Rate = 30 slm)

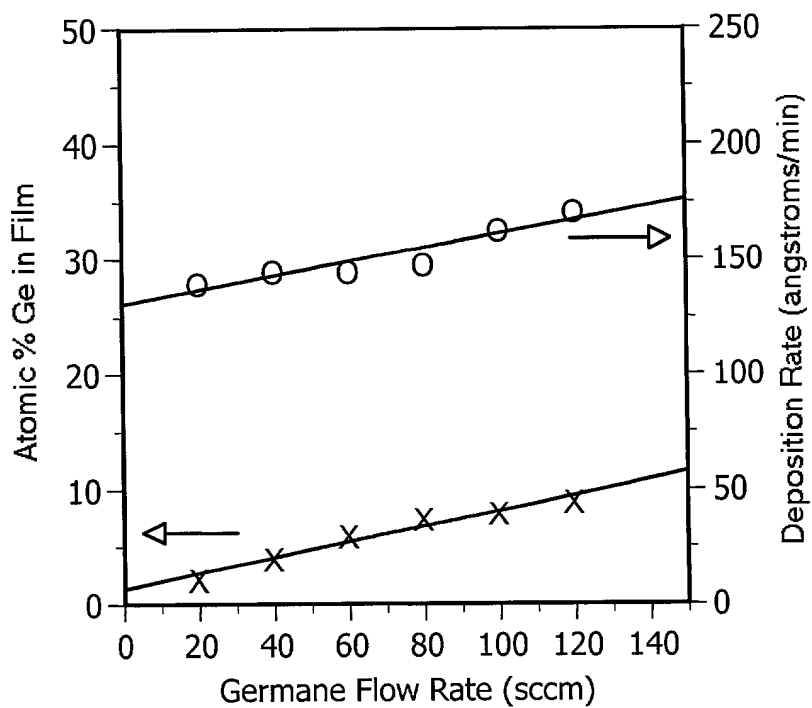
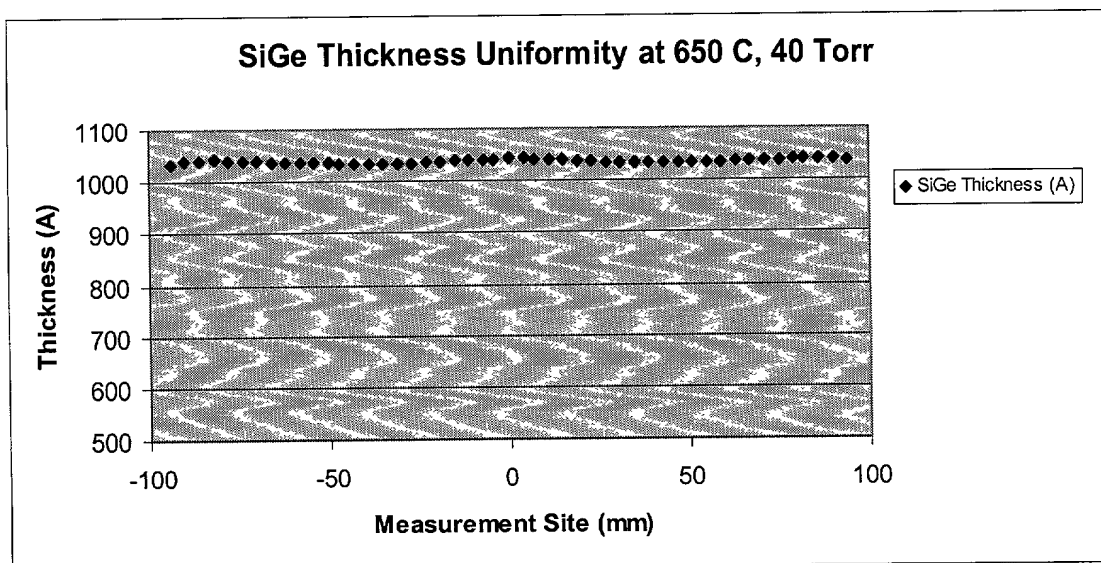
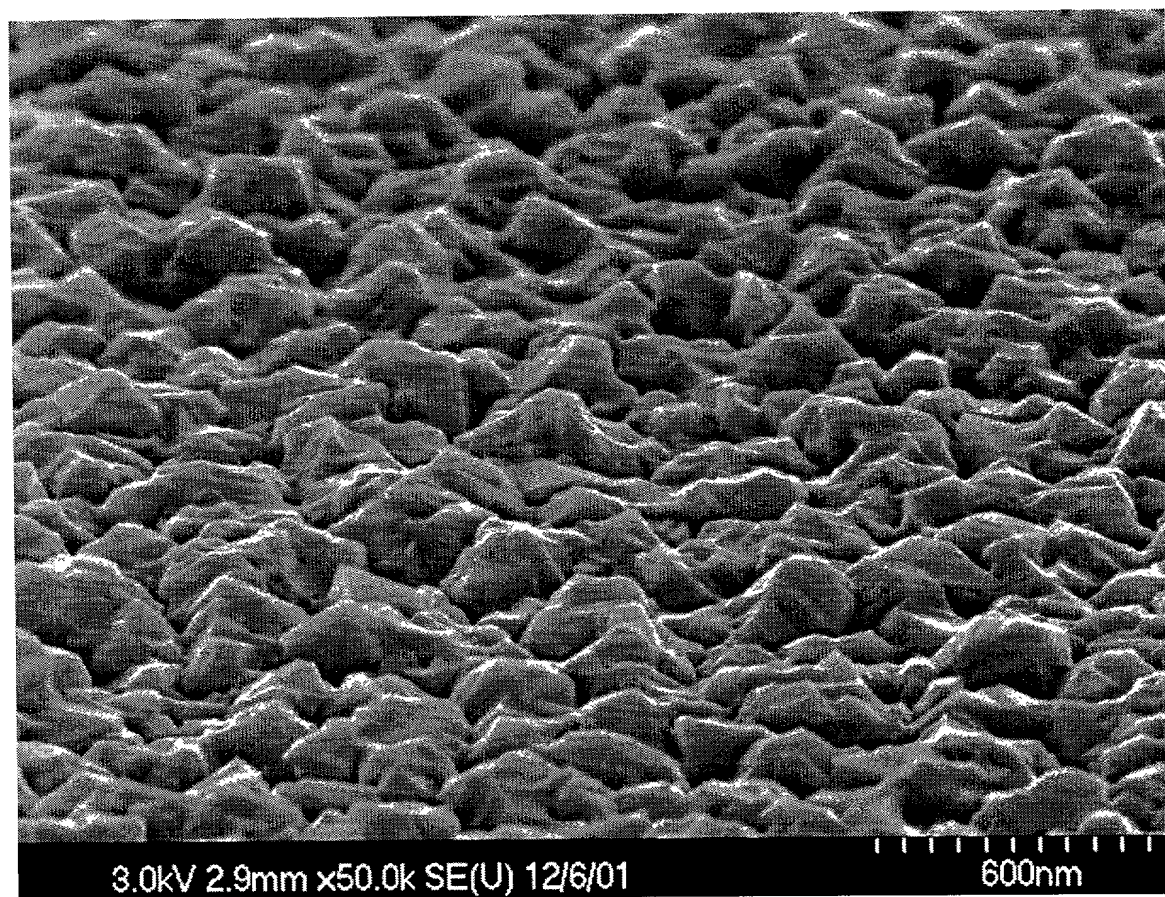


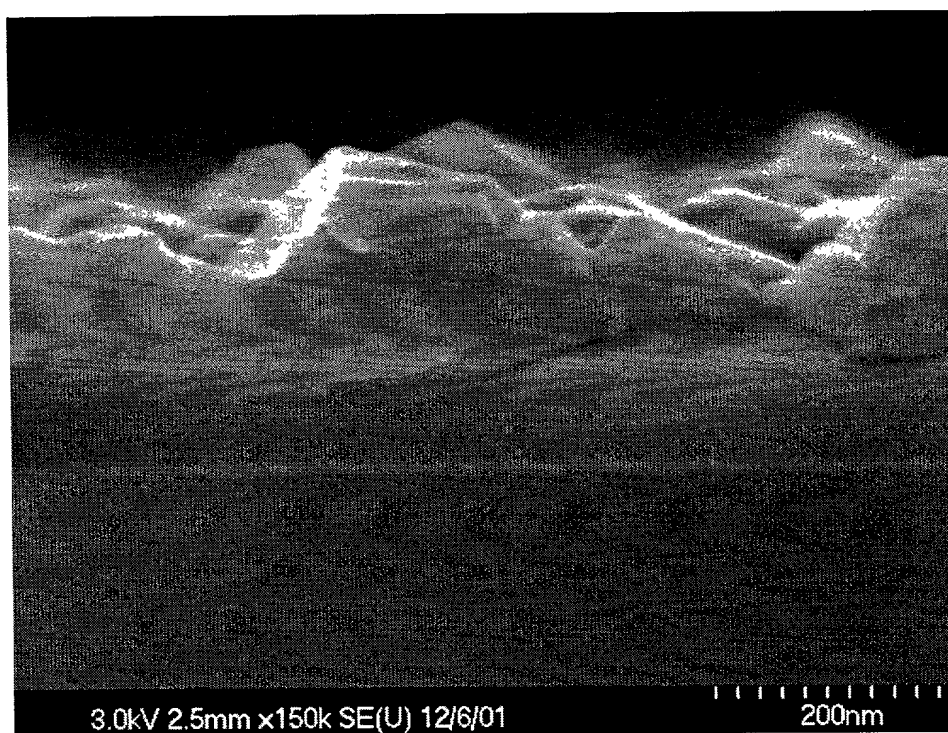
FIGURE 11



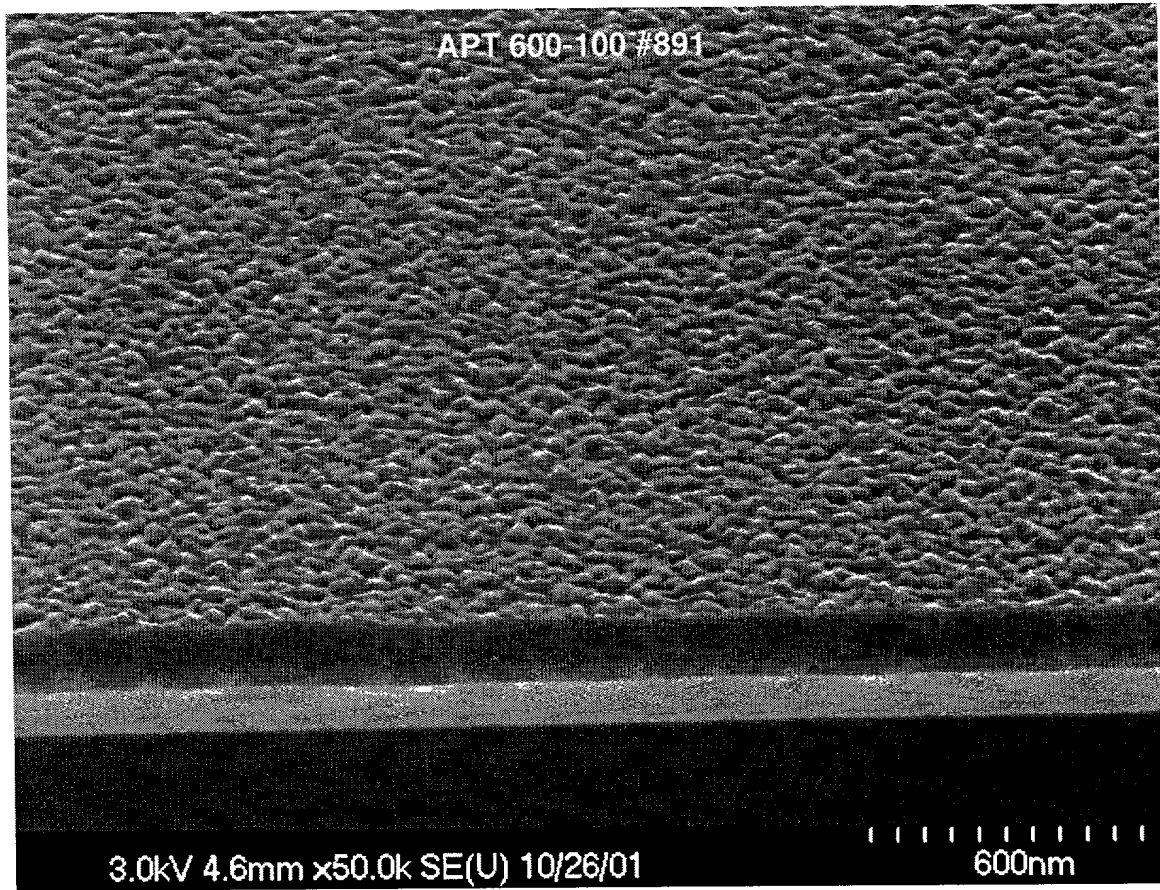
**FIGURE 12**  
**SEM Photomicrograph of Si-Ge Film Deposited Using Silane and Germane**



**FIGURE 13**  
**SEM Photomicrograph of Si-Ge Film Deposited Using Silane and Germane**



**FIGURE 14**  
**SEM Photomicrograph of Si-Ge Film Deposited Using Trisilane and Germane**



**FIGURE 15**  
**SEM Photomicrograph of Si-Ge Film Deposited Using Trisilane and Germane**

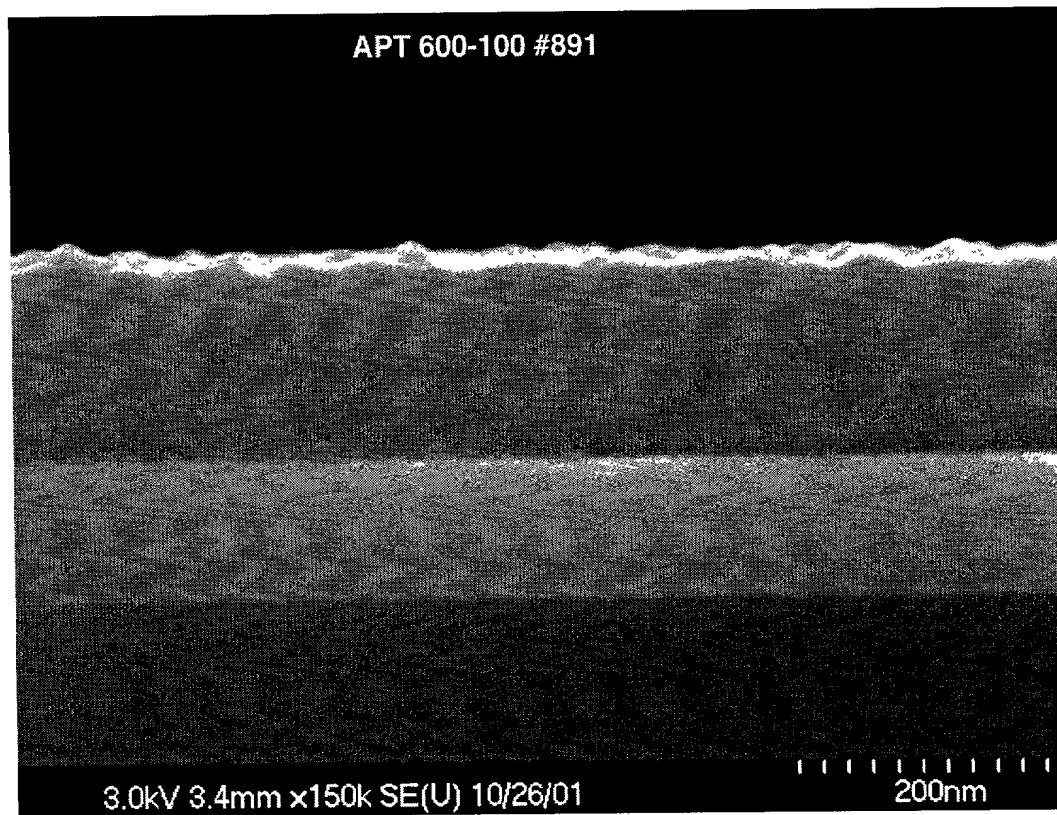


FIGURE 16

ARRHENIUS PLOT FOR SILANE, DISILANE AND TRISILANE

